Family compensated for death after illegible prescription

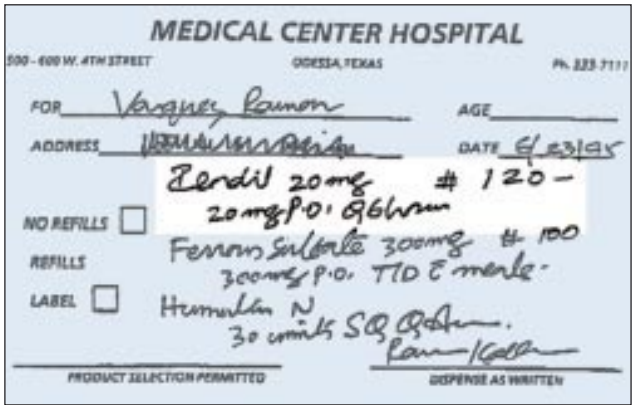
Fred Charatan *Florida*

A Texas jury has attributed the death of a 42 year old patient to an illegible prescription and has ordered the doctor who wrote it to pay $225 000 (£140 625) compensation to the patient's family. The total judgment of $450 000 included an equal award against the dispensing pharmacist.

The doctor, cardiologist Dr Ramachandra Kolluru, wrote a prescription for 20 mg Isordil (isosorbide dinitrate) for angina, every six hours. But, because of the illegibility of the prescription, argued Kent Buckingham, lawyer for the family of the patient, Ramon Vasquez, the pharmacist dispensed the same dosage of Plendil (felodipine), a calcium channel blocker used in the treatment of hypertension, for which the maximum daily dose is only 10 mg. A day after taking what equalled a 16% overdose of felodipine, Mr Vasquez had a heart attack and died several days later. The overall quality of care given by Dr Kolluru was not at issue, the trial heard; his illegible prescription was the sole reason for the judgment.

The case again raises the issue of the legibility of doctors' handwriting. Mr Buckingham pointed out: "Many doctors are having to stop and think, 'By golly, that prescription I wrote illegibly this morning may result in an adverse verdict.' "

Three policies issued over the past seven years by the American Medical Association have urged doctors to "improve the legibility of handwritten orders for medications" and to review all orders for accuracy and legibility. Doctors with poor handwriting are advised to use direct, computerised order entry systems or at least to print or type medication orders. □



Poor handwriting of a prescription led to patient's death

Survey finds that 1 in 10 children has a mental disorder

Gavin Yamey *BMJ*

A survey of the mental health of children in England, Scotland, and Wales has shown that 10% of 5-15 year olds have some type of mental disorder.

The survey was conducted by the Office for National Statistics in partnership with the Institute of Psychiatry and the Maudsley Hospital. Researchers interviewed 10 500 parents and 4500 children. A postal questionnaire was also sent to the teachers of all children who had participated in the survey. Results showed that 5% of children had conduct disorders, 4% had emotional disorders, and 1% were classed as being hyperkinetic.

One of the most striking findings was the strong association between family income or social class and the mental health of the child. Children from families in social class V (unskilled occupations) were three times more likely to have a mental health problem than those from social class I (professionals). The association was found for all three groups of disorders.

Robert Goodman, professor of child psychiatry at the Institute of Psychiatry and coauthor of the survey, said: "Children from families where the parents had never worked had rates of mental disorder of 20%. These children are at risk of drug abuse, suicide, unemployment, and adult mental health problems. They are therefore caught in a cycle of disadvantage."

There were two novel aspects to the study methodology. Firstly, random sampling of child benefit records was used to recruit children. These records include nearly all children in the United Kingdom, and so the sample was more representative than standard household surveys. Secondly, the lay interviewers used computerised structured interviews that prompted them to ask further questions about specific symptoms and their impact on children's lives. The detailed answers were then analysed by three child psychiatrists so that a diagnosis of mental disorder was based not just on symptoms but on evidence of distress or interference with personal function. Previous studies based on symptoms alone may have been inaccurate in defining disorders. □

A short version of the report, *The Development and Well-Being of Children and Adolescents in Great Britain*, can be found at www.ons.gov.uk.

High coffee intake increases risk of miscarriage

Jacqui Wise *London*

Drinking more than five cups of coffee a day during pregnancy is associated with an increased risk of spontaneous abortion, according to a large retrospective study. The results showed, however, that moderate consumption of caffeine is unlikely to increase miscarriage.

The researchers, from the National Institute of Child Health and Human Development and the University of Utah in Salt Lake City, measured a biological marker, serum paraxanthine (a metabolite of caffeine) in 591 women who had spontaneous abortions at less than 140 days' gestation and in 2558 matched women who gave birth to live infants (*New England Journal of Medicine* 1999;341:1639-44). The mean serum paraxanthine concentration was higher in the women who had had a miscarriage than in the controls (752 v 583 ng/ml, P<0.001). Women whose paraxanthine levels were equivalent to consumption of five or more cups of coffee a day were more than twice as likely to miscarry as those with lower paraxanthine levels.

Previous investigations into caffeine intake and risk of miscarriage have produced conflicting results.

David James, professor of fetomaternal medicine at Queen's Medical Centre, Nottingham, said that the latest study was a "robust piece of epidemiological work which has overcome some of the problems found with previous studies." For example, the new study did not rely on potentially inaccurate self reporting of caffeine consumption. The study also included a large number of matched controls. Professor James said that a problem with the new study, however, as with previous studies, was that it was not prospective but retrospective.

Brenda Eskenazi from the University of Californian School of Public Health pointed out another shortfall with the study. "A single serum measurement … may not accurately reflect a woman's exposure during the critical period of fetal development."

Dr Eskenazi suggested that healthcare providers should continue to counsel women who are pregnant or breast feeding to limit their caffeine intake. □